

31

Notice of Allowability	Application No.	Applicant(s)	
	10/766,549	KURZUM ET AL.	
	Examiner	Art Unit	
	Nghia M. Doan	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. ☒ This communication is responsive to application filed on 01/27/2004 and Applicant Amended filed on 02/14/2006.
- 2. ☒ The allowed claim(s) is/are 1,3-4, and 6-21 (renumbered).
- 3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____
 Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>01/27/2006</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


VUTHE SILK
 PRIMARY EXAMINER

DETAILED ACTION

1. Responsive to communication application 10/755,549 filed on 01/27/2004 and Applicant Amended filed on 02/14/2006, claims 1, 3-4, and 6-21 are pending.

Claims 1, 15, 18, and 20 have been amended.

Claims 2 and 5 have been cancel.

Claim 21 has been added.

2. The Oath/Declaration objection has been obviated.
3. Applicant's arguments, filed on 02/14/2006, with respect to 1, 3-4, and 6-21 have been fully considered and are persuasive.

Allowable Subject Matter

4. Claims 1, 3-4, and 6-21 are allowed over the prior art.
5. The following is a statement of reasons for the indication of allowable subject matter: taking claim 1 as exemplary, the prior art does not teach or fairly suggest of the comprising inventive steps of a method for resolving cell placement overlap in an integrated circuit comprising the step of: constructing a network flow model representing the movement of the cells between the physical regions, simultaneously in the two physical dimension of the integrated circuit layout; solving the network flow model to determine a desired flow of the cells between the physical regions of the integrated circuit; and moving the plurality of cells simultaneously across physical neighboring regions based on the desired flow between the regions.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. There two prior arts are closed to the applicant invention.

D'Haeseleer et al. (D'Haeseleer) (US 5619,419) lacks to teach the inventive step constructing a network flow model representing the movement of the cells between the physical regions, simultaneously in the two physical dimension of the integrated circuit layout; solving the network flow model to determine a desired flow of the cells between the physical regions of the integrated circuit; and moving the plurality of cells simultaneously across physical neighboring regions based on the desired flow between the regions.

Yang at al. (Efficient Network Flow Based Min-Cut Balanced Partitioning, ACM, 1994, pages 58-55) lacks to teach determine a desired flow of the cells between the physical regions of the integrated circuit; and moving the plurality of cells simultaneously across physical neighboring regions based on the desired flow between the regions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghia M. Doan whose telephone number is 571-272-5973. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2825

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghia M. Doan
Patent Examiner
AU 2825
NMD


VUTHE SIEK
PRIMARY EXAMINER